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OM protein - protein search, using sw model

Run on: January 3, 2003, 22:48:05 : Search time 21 Seconds

(without alignments)
815.435 Million cell updates/sec

Title: US-09-294-539-4
Perfect score: 2952
Sequence: 1 MEPTSHVTNAFSDSDSASV.....RSLGSSSSSTSGAIRPRR 582

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :
1: Issued_Patents_AA.*
2: /cgn2_6/plodata/2/1aa/5A_COMB.pep.*
3: /cgn2_6/plodata/2/1aa/5B_COMB.pep.*
4: /cgn2_6/plodata/2/1aa/6A_COMB.pep.*
5: /cgn2_6/plodata/2/1aa/6B_COMB.pep.*
6: /cgn2_6/plodata/2/1aa/Backfill1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description |
|------------|--------|-------------|--------|--------------------|--------------------|
| 1 | 1276 | 43.2 | 593 | US-08-989-478-2 | Sequence 2, Appl1 |
| 2 | 1276 | 43.2 | 593 | US-08-996-685-2 | Sequence 2, Appl1 |
| 3 | 1276 | 43.2 | 593 | US-08-880-179-3 | Sequence 3, Appl1 |
| 4 | 1270 | 43.0 | 593 | US-08-989-478-8 | Sequence 8, Appl1 |
| 5 | 1270 | 43.0 | 593 | US-08-996-685-8 | Sequence 8, Appl1 |
| 6 | 1188.5 | 40.3 | 521 | US-08-989-478-12 | Sequence 12, Appl1 |
| 7 | 1188.5 | 40.3 | 521 | US-08-996-685-12 | Sequence 12, Appl1 |
| 8 | 1134 | 38.4 | 469 | US-08-989-478-10 | Sequence 10, Appl1 |
| 9 | 1134 | 38.4 | 469 | US-08-996-685-10 | Sequence 10, Appl1 |
| 10 | 1052.5 | 35.7 | 397 | US-08-989-478-14 | Sequence 14, Appl1 |
| 11 | 1052.5 | 35.7 | 397 | US-08-996-685-14 | Sequence 14, Appl1 |
| 12 | 751 | 25.4 | 261 | US-08-989-478-16 | Sequence 16, Appl1 |
| 13 | 751 | 25.4 | 261 | US-08-996-685-16 | Sequence 16, Appl1 |
| 14 | 420 | 14.2 | 143 | US-09-325-932A-197 | Sequence 197, App |
| 15 | 201 | 6.8 | 102 | US-09-325-932A-199 | Sequence 199, App |
| 16 | 133 | 4.5 | 1088 | US-09-082-059-2 | Sequence 2, Appl1 |
| 17 | 127 | 4.3 | 1839 | US-09-172-977-4 | Sequence 4, Appl1 |
| 18 | 126 | 4.3 | 843 | US-09-172-977-3 | Sequence 3, Appl1 |
| 19 | 124.5 | 4.2 | 300 | US-08-897-340-32 | Sequence 32, Appl1 |
| 20 | 124.5 | 4.2 | 300 | US-09-252-329-32 | Sequence 32, Appl1 |
| 21 | 122 | 4.1 | 41 | US-08-989-478-17 | Sequence 17, Appl1 |
| 22 | 122 | 4.1 | 41 | US-08-989-478-19 | Sequence 19, Appl1 |
| 23 | 122 | 4.1 | 41 | US-08-989-478-21 | Sequence 21, Appl1 |
| 24 | 122 | 4.1 | 41 | US-08-989-478-23 | Sequence 23, Appl1 |
| 25 | 122 | 4.1 | 41 | US-08-996-685-17 | Sequence 17, Appl1 |
| 26 | 122 | 4.1 | 41 | US-08-996-685-19 | Sequence 19, Appl1 |
| 27 | 122 | 4.1 | 41 | US-08-996-685-21 | Sequence 21, Appl1 |

| | | | | | |
|----|-------|-----|------|-------------------|--------------------|
| 28 | 122 | 4.1 | 41 | US-08-996-685-23 | Sequence 23, Appl1 |
| 29 | 122 | 4.1 | 41 | US-08-880-179-4 | Sequence 4, Appl1 |
| 30 | 122 | 4.1 | 41 | US-08-880-179-6 | Sequence 6, Appl1 |
| 31 | 122 | 4.1 | 41 | US-08-880-179-8 | Sequence 8, Appl1 |
| 32 | 122 | 4.1 | 41 | US-08-880-179-10 | Sequence 10, Appl1 |
| 33 | 119.5 | 4.0 | 359 | US-08-388-756-2 | Sequence 2, Appl1 |
| 34 | 119.5 | 4.0 | 359 | US-08-748-428-2 | Sequence 2, Appl1 |
| 35 | 119.5 | 4.0 | 359 | US-08-802-372-3 | Sequence 3, Appl1 |
| 36 | 119.5 | 4.0 | 359 | US-08-910-830-2 | Sequence 2, Appl1 |
| 37 | 119.5 | 4.0 | 389 | US-08-802-322-14 | Sequence 14, Appl1 |
| 38 | 119 | 4.0 | 1166 | US-09-350-982C-5 | Sequence 5, Appl1 |
| 39 | 116 | 3.9 | 787 | US-09-188-930-334 | Sequence 334, App |
| 40 | 112 | 3.8 | 1964 | US-09-467-997-1 | Sequence 1, Appl1 |
| 41 | 111.5 | 3.8 | 356 | US-08-903-851-2 | Sequence 2, Appl1 |
| 42 | 110.5 | 3.7 | 673 | US-09-196-387-8 | Sequence 8, Appl1 |
| 43 | 110 | 3.7 | 292 | US-09-605-785-532 | Sequence 532, App |
| 44 | 110 | 3.7 | 292 | US-09-439-313-532 | Sequence 532, App |
| 45 | 110 | 3.7 | 329 | US-09-605-785-376 | Sequence 376, App |

ALIGNMENTS

RESULT 1
US-08-989-478-2
: Sequence 2, Application US/08989478
: Patent No. 5986082
: GENERAL INFORMATION:
: APPLICANT: Unes, Scott
: APPLICANT: Hunt, Michelle
: APPLICANT: Steiner, Henry-York
: APPLICANT: Ryals, John
: TITLE OF INVENTION: ALTERED FORMS OF THE NIM1 GENE CONFERRING
: TITLE OF INVENTION: DISEASE RESISTANCE IN PLANTS
: NUMBER OF SEQUENCES: 32
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: No. 5986082artis Corporation
: STREET: 3054 Cornwallis Road
: CITY: Research Triangle Park
: STATE: No. 5986082th Carolina
: COUNTRY: USA
: ZIP: 27709
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patentin Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/989,478
: FILING DATE:
: CLASSIFICATION:
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 60/033,177
: FILING DATE: 13-DEC-1996
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 60/034,379
: FILING DATE: 27-DEC-1996
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 60/034,382
: FILING DATE: 27-DEC-1996
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 60/034,730
: FILING DATE: 10-JAN-1997
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 60/035,021
: FILING DATE: 10-JAN-1997
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 60/035,022
: FILING DATE: 10-JAN-1997
: ATTORNEY/AGENT INFORMATION:
: NAME: Meigs, J. Timothy
: REGISTRATION NUMBER: 38,241
: REFERENCE/DOCKET NUMBER: PF/5-21214/P1/CGC1911

TELECOMMUNICATION INFORMATION:

TELEPHONE: (919) 541-8587

TELEFAX: (919) 541-8689

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 593 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

US-08-989-478-2

Query Match 43.2%; Score 1276; DB 2; Length 593;

Best Local Similarity 47.2%; Pred. No. 1.4e-121;

Matches 273; Conservative 113; Mismatches 165; Indels 28; Gaps 9;

5 TSHVTNAFSDSDSASVEEGDADADADVEALRLSDNLAAFRSPEDFAFLADARIATVFGG 64
 17 TSFVATDNTDSSIVYLAEQVLTGPDVSALQLLSNSFESVFPDPPD--FYSDAKLVL-- 71
 65 GGGGDLRYHRCVLSARSPFLRGVAFARRAAAAAGGGGEGSGSRLLRLGSGGEEVEYG 124
 72 -SDGREVSFHRCLVLSARSPFLRGVAFARRAAAAAGGGGEGSGSRLLRLGSGGEEVEYG 124
 125 YEALRLVLDYLYSGRGVDPKAAACLVDEDCAHVGCHPAVAFMAQVLFPASTFOVAELTN 184
 125 FDSVYTVLAVYVSSRVPRPKGVSECADENCCHVACRAVDPMLEVLALYAFIKIPELIT 184
 185 LFQRLLDVLDKVEYDNLILLVLANLCKNSCKMLLERCLDMVNSLDMITLKSLEPPD 244
 185 LKVRHLDVAVDVVIEDTLVLKLANICGKACMKLLDRCKEITVKSNDVMSLEKSLPEE 244
 245 VKQITDALSGLISPEKGFNNKHVRIRALSDSDEIVRLMTEQOTLMDAFALH 304
 245 LKVEILDRKELGLEVPKVK---KHVSNVHKLSDSDDELKVLKLEKDHMLDQCALH 300
 305 YAVEHDSKITTELDLADLVNHRNPRGTYVLIHARRRPRKIIVSLTKGARPAVTF 364
 301 FAVAACNVATADLLKLDLADVNHRNPRGTYVLIHVAAMRKEPOLILSLKEGASASEATL 360
 365 DGRKAVQISKRLTKQGDYFGVTEBEKSPKDKLCIFILEQAEPRDPOLGEASVSLAMGE 424
 361 EGRTALMIKQATMAVECNIPEDCKHSLKGRLCVEIILQEDKREQIPDPVPSFAVAD 420
 425 SLRGRLLYENRVALARIMPPEARVAMDIAOVDTLEFNLSGANPPEER---QRTTV 480
 421 ELKMTLLDENVALAQRFPTEAQAAMIAEMKGCETIVS---LEPDRLLGTRKTEP 477
 481 DINESPFIKKEHLARMTLSKTVELGKRRFPFPCSNVLDKIMD-DETPVSLGRDTSAAK 539
 478 GYAIAPFRILEEHSRLKALSKTVELGKRRFPFPCSAVLDQIMNCEDLTOLACGEDDTAK 537
 540 R---KRPDLQDVLOKAPHEKKEENDRSGLSSSSSSTS 574
 538 RLOKKORYMEIOETLKAFSEDLGNSSLTDSSTIS 576

RESULT 2

US-08-996-685-2

Sequence 2, Application US/08996685

Patent No. 6031153

GENERAL INFORMATION:

APPLICANT: Ryals, John

APPLICANT: Friedrich, Leslie

APPLICANT: Uknes, Scott

APPLICANT: Molina, Antonio

APPLICANT: Ruess, Wilhelm

APPLICANT: Knauf-Belter, Gertrude

APPLICANT: Kung, Ruth

APPLICANT: Kessmann, Helmut

APPLICANT: Oostendorp, Michael

TITLE OF INVENTION: METHOD FOR PROTECTING PLANTS

NUMBER OF SEQUENCES: 32

CORRESPONDENCE ADDRESS:

ADDRESSEE: No. 6031153artis Corporation

STREET: 3054 Cornwells Road

CITY: Research Triangle Park

STATE: No. 6031153th Carolina

COUNTRY: USA

ZIP: 27709

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentln Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/996,685

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/761,543

FILING DATE: 6-DEC-1996

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/034,378

FILING DATE: 27-DEC-1996

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/034,379

FILING DATE: 27-DEC-1996

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/034,382

FILING DATE: 27-DEC-1996

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/034,730

FILING DATE: 10-JAN-1997

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/035,021

FILING DATE: 10-JAN-1997

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/035,022

FILING DATE: 10-JAN-1997

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/875,015

FILING DATE: 16-JUL-1997

ATTORNEY/AGENT INFORMATION:

NAME: Meigs, J. Timothy

REGISTRATION NUMBER: 38,241

REFERENCE/DOCKET NUMBER: PF/5-21215/P1/CGC1912

TELECOMMUNICATION INFORMATION:

TELEPHONE: (919) 541-8587

TELEFAX: (919) 541-8689

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 593 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

US-08-996-685-2

Query Match 43.2%; Score 1276; DB 3; Length 593;

Best Local Similarity 47.2%; Pred. No. 1.4e-121;

Matches 273; Conservative 113; Mismatches 165; Indels 28; Gaps 9;

5 TSHVTNAFSDSDSASVEEGDADADADVEALRLSDNLAAFRSPEDFAFLADARIATVFGG 64
 17 TSFVATDNTDSSIVYLAEQVLTGPDVSALQLLSNSFESVFPDPPD--FYSDAKLVL-- 71
 65 GGGGDLRYHRCVLSARSPFLRGVAFARRAAAAAGGGGEGSGSRLLRLGSGGEEVEYG 124
 72 -SDGREVSFHRCLVLSARSPFLRGVAFARRAAAAAGGGGEGSGSRLLRLGSGGEEVEYG 124
 125 YEALRLVLDYLYSGRGVDPKAAACLVDEDCAHVGCHPAVAFMAQVLFPASTFOVAELTN 184
 125 FDSVYTVLAVYVSSRVPRPKGVSECADENCCHVACRAVDPMLEVLALYAFIKIPELIT 184

[illegible]

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1      RESULT 3
2      US-08-880-179-3
3      ; Sequence 3, Application US/08880179
4      ; Patent No. 6091004
5      ; GENERAL INFORMATION:
6      ; APPLICANT: Ryals, John
7      ; APPLICANT: Delaney, Terry
8      ; APPLICANT: Friedrich, Leslie
9      ; APPLICANT: Weymann, Kristiana
10     ; APPLICANT: Lawton, Kay
11     ; APPLICANT: Ellis, Daniel
12     ; APPLICANT: Uknes, Scott
13     ; APPLICANT: Jesse, Taco
14     ; APPLICANT: Vos, Pieter
15     ; TITLE OF INVENTION: GENE ENCODING A PROTEIN INVOLVED IN THE
16     ; TITLE OF INVENTION: SIGNAL TRANSDUCTION CASCADE LEADING TO SYSTEMIC ACQUIRED RESIS
17     ; NUMBER OF SEQUENCES: 17
18     ; CORRESPONDENCE ADDRESS:
19     ; ADDRESSEE: No. 6091004atl's Corporation
20     ; STREET: 520 White Plains Road, P.O. Box 2005
21     ; CITY: Tarrytown
22     ; STATE: New York
23     ; COUNTRY: USA
24     ; ZIP: 10591
25     ; COMPUTER READABLE FORM:
26     ; MEDIUM TYPE: Floppy disk
27     ; COMPUTER: IBM PC compatible
28     ; OPERATING SYSTEM: PC-DOS/MS-DOS
29     ; SOFTWARE: PatentIn Release #1.0, Version #1.30
30     ; CURRENT APPLICATION DATA:
31     ; APPLICATION NUMBER: US/08/880.179
32     ; FILING DATE:
33     ; CLASSIFICATION: 800
34     ; ATTORNEY/AGENT INFORMATION:
35     ; NAME: Meigs, J. Timothy
36     ; REGISTRATION NUMBER: 38,241
37     ; REFERENCE/DOCKET NUMBER: CGC 1909
38     ; TELECOMMUNICATION INFORMATION:
39     ; TELEPHONE: (919) 541-8587
40     ; TELEFAX: (919) 541-8689
41     ; INFORMATION FOR SEQ ID NO: 3:
42     ; SEQUENCE CHARACTERISTICS:
43     ; LENGTH: 593 amino acids
44     ;

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;      TYPE: amino acid
;      TOPOLOGY: linear
;      MOLECULE TYPE: protein
US-08-880-179-3

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| Query Match | 43.28; | Score 1276; | DB 3; | Length 593; |
| Best Local Similarity | 47.28; | Pred. No. 1.4e-121; | | |
| Matches 273; | Conservative .113; | Mismatches 165; | Indels 28; | Gaps 9 |

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0Y 5 TSHWTMAESDSDSASVEEGDADADADAEALRLRSLDNLAAAFRSPEDPAFLDRIANVPG 64
17 TSPVATDMTDSIIYVLAAEQVLTGPVDSALDLSNSFEVSFDSDD--FISDAKLV- -- 71
0Y 65 GGGGDDLRHNCVLSARSPELLRGVAFARRAAAAAGGGEDSESRLELRELLGGGEEVYG 124
72 -SDGREVSFHRVCVLSARSPFKSALA--AAKKEKDSNNTPAAVKAELKEI---AKDVEG 124
0Y 125 YEALRLVDIYTLISGRVGDLPKAACLCYDEDCAHYCHPAAVFAAQVLFAASTQOAVELTN 184
125 FDSVTVTLAAVYSSRSVRPPPKGVSECADENCHVACRPADVFMLEVIYTLAFIKIPELLT 184
0Y 185 LEORLLDVLIDKVEVDNLLILTSVANLCNSCKMLERCLDMVVRNSLDMITTEKSLPD 244
185 LYORLLDVPKVVYIEDTLVTLKANTCGAKMLLDROCKEIIYKVSNNVMSLEKSLPEE 244
0Y 245 VIKQIIDARLSLGLISPEKNGFPMKHVHRIHRAALDSQDVELVHMLTLEGOTNLDDAFALH 304
245 LKELIIDRRKELGEVEPKV----KHYSNVHKAALDSODIETLYKLLKEBHNTLDDACALH 300
0Y 305 YAVEHCDSKITTELLDLALADVNHHRNPRGYTVLHIAARRREPKIIVSLTKGARPADVT 364
301 FAVAACNVKATMTDLKLADLVNHRNPRGYTVLHVAAAMRKEPQIILSLLEKASASEATL 360
0Y 365 DGRKAVOISKULTKOGDYFGVTEGCKSPKDRCLCILELEQAEERDDPLGERSVSLAMAGE 424
361 EGRFALMAKATAVAVECINNPLEQCKHSLKRLCLVELLEDEQKEQIPROVPSPSFAAAD 420
0Y 425 SLRGLTLLENKRVALARIMPEMARVAMIDIOVGTLEFNIGSCANPPEP-----ORQTV 480
421 ELKMTLLDENKRVLAQVLAFTPEQAAAMEIEMKGTEEFIVTS---LEPRLGTKRTSP 477
0Y 481 DLNESPTLMKEEHLARMTALSKVELGRKPPRCNSVNLDKIMD--DETDPVSLGRDTSAEK 539
478 GVKTIAPFRILBEHQSRIKALSKVELGRKPPRCNSAVLDMQNCEDLTQLACGEDDPAEK 537
0Y 540 R-----KRFHDIQDVLOKAFHHDCKEENDRSGJSSSSSTS 574
538 RLOKKORVMEIOETLRKAFASDNLDELGSSSLTJDSSTSS 576

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1      RESULT 4
2      US-08-989-478-8
3      : Sequence 8, Application US/08989478
4      : Patent No. 5986082
5      : GENERAL INFORMATION:
6      : APPLICANT: Unes, Scott
7      : APPLICANT: Hunt, Michelle
8      : APPLICANT: Steiner, Henry-York
9      : APPLICANT: Ryals, John
10     : TITLE OF INVENTION: ALTERED FORMS OF THE NIM1 GENE CONFERRING
11     : TITLE OF INVENTION: DISEASE RESISTANCE IN PLANTS
12     : NUMBER OF SEQUENCES: 32
13     : CORRESPONDENCE ADDRESS:
14     : ADDRESSEE: No. 5986082artis Corporation
15     : STREET: 3054 Cornwallis Road
16     : CITY: Research Triangle Park
17     : STATE: No. 5986082th Carolina
18     : COUNTRY: USA
19     : ZIP: 27709
20     :
21     : COMPUTER READABLE FORM:
22     : MEDIUM TYPE: Floppy disk
23     : COMPUTER: IBM PC compatible
24     : OPERATING SYSTEM: PC-DOS/MS-DOS
25     :

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Db 361 EGRALMIKAKATMAVECONNIPECKCKHSKGRCLCEVLEEDKREDOJIPROVPSPFAAAD 420

QY 425 SLRGRLYLEENVALARIEMPEARVAMDAQVDTGLEFNUGANPPER---QRTTV 480

Db 421 ELKMTLLDLERNVALAQLFPEEAQAMEIEMKGTCEFIYTS--DEPRLTGTRKTRSP 477

QY 481 DLNESPFIKKEHRLARMTALSKYTELGRFPFRCSNVLDKIMD 523

Db 478 GVKIAPFRILEEHOSRLKALSKYTELGRFPFRCSAVLDQIMN 520

RESULT 7

US-08-996-685-12

Sequence 12, Application US/08996685

Patent No. 6031153

GENERAL INFORMATION:

APPLICANT: Ryals, John

APPLICANT: Friedrich, Leslie

APPLICANT: Uknes, Scott

APPLICANT: Molina, Antonio

APPLICANT: Ruess, Wilhelm

APPLICANT: Knauf-Beiter, Gertrude

APPLICANT: Kung, Ruth

APPLICANT: Kessmann, Helmut

APPLICANT: Oostendorp, Michael

TITLE OF INVENTION: METHOD FOR PROTECTING PLANTS

NUMBER OF SEQUENCES: 32

CORRESPONDENCE ADDRESSES:

ADDRESSEE: No. 6031153artis Corporation

STREET: 3054 Cornwallis Road

CITY: Research Triangle Park

STATE: No. 6031153th Carolina

COUNTRY: USA

ZIP: 27709

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/996,685

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/761,543

FILING DATE: 6-DEC-1996

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/034,378

FILING DATE: 27-DEC-1996

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/034,379

FILING DATE: 27-DEC-1996

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/034,382

FILING DATE: 27-DEC-1996

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/034,730

FILING DATE: 10-JAN-1997

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/035,021

FILING DATE: 10-JAN-1997

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/035,022

FILING DATE: 10-JAN-1997

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/035,024

FILING DATE: 10-JAN-1997

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/875,015

FILING DATE: 16-JUL-1997

ATTORNEY/AGENT INFORMATION:

NAME: Meigs, J. Timothy

```

: REGISTRATION NUMBER: 38,241
: REFERENCE/DOCKET NUMBER: PF/5-21215/P1/CGC1912
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (919) 541-8587
: TELEFAX: (919) 541-8689
: INFORMATION FOR SEQ ID NO: 12:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 521 amino acids
: TYPE: amino acid
: TOPOLOGY: linear
: MOLECULE TYPE: protein
: US-08-996-685-12

Query Match      40.3%; Score 1188.5; DB 3; Length 521:
Best Local Similarity 48.0%; Pred. No. 1e-112;
Matches 251; Conservative 100; Mismatches 149; Indels 23; Gaps 7

OY 5 TSHVNFAPSDSASAEEDGADADADVDVLELRRLSDVLAAPFSPDFATLADARIVPGG 64
Db 17 TSFVATDNTDSSITVILAAQVLITGPVSAQLQLLSNFSFEVFPSPD -FYSDAKIVL---- 71
OY 65 GGGGGDLRYHRCVLSARSPFLKGVBARAAAAAGGGGEGDSERLEIRELLGGGEEVEVG 124
Db 72 -SDGREVSPHRCVLSARSSFFKSAAL -AAKKEKDSNNTAAVKLELKI---AKDYEVG 124
OY 125 YEALRLVDLYLSGRVGLPKAACLCVDEDCAHVGCHPAVAFMAOVLFAASTQVAELTN 184
Db 125 FDSVTVTLAYVYSSRRPRPKGVSECDENCCCHVACRPVADPMLLVLYLAFTFKRIPELIT 184
OY 185 LFORLLADVLDVEVDENLLITLVANLCKSCSKMLLEKLDWVRSNLTMTLEKSLPDP 244
Db 185 LQRRLLDWDVVDVYEDTIVILKLANICKCKACKLLDRCKEITVKSNNVMSLEKSLPEE 244
OY 245 VIKQITIDARSLGLISPEKNGPKNHVRRIRRALDSDVDVELYRMLLTGOTNLDDAFALH 304
Db 245 LYKEITIDRRKELGLEPKVK---KIVSNVHRALDSDDIELVKLLKEDHTNDDACALH 300
OY 305 YAVEHODSKITTELLDALADVNNHNPRTIVLHTAARREREKIYSLTKARPADVIF 364
Db 301 FAVAVCNVKTADLLDLADVNHRNPRTIVLHVAAKREPOLITLLEKGSASEATL 360
OY 365 DGRKAVQISKRLTGQGDVGVTEEGGPPSPKDRICIEITLQAEPRDPOLGEASVSLMAGE 424
Db 361 ERTTLLMAIAKQTMAVECCNNIPQCKHSLKGRCLVILIQEDKREDIPRDVPSFAVAD 420
OY 425 SLGRLLYLENVVALARIMFPMEARVAMDAOVDGTLLENLGSGANPPR---QRTTV 480
Db 421 ELKMTLLDENVALAQRFLPTEQAQAMBAIEMKGCEFIY---LEPDRLLGTKRTSP 477
OY 481 DUNSDPIMKEEHLARMTALSKTVELGKFFPPRCSSNVLDKIMD 533
Db 478 GVKIAPFRIIEHOSRKLASKTVELGKRRFPFGCSAVLDQIMN 520

RESULT 8
US-08-989-478-10
: Sequence 10, Application US/08989478
: Patent No. 5986082
: GENERAL INFORMATION:
: APPLICANT: Uknes, Scott
: APPLICANT: Hunt, Michelle
: APPLICANT: Steiner, Henry-York
: APPLICANT: Ryals, John
: TITLE OF INVENTION: ALTERED FORMS OF THE NIM1 GENE CONFERRING
: TITLE OF INVENTION: DISEASE RESISTANCE IN PLANTS
: NUMBER OF SEQUENCES: 32
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: No. 5986082artis Corporation
: STREET: 3054 Cornwallis Road
: CITY: Research Triangle Park
: STATE: No. 5986082th Carolina
: COUNTRY: USA
: ZIP: 27709

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SEQUENCE CHARACTERISTICS:

LENGTH: 469 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-996-685-10

Query Match 38.4%; Score 1134; DB 3; Length 469;
 Best Local Similarity 51.4%; Pred. No. 3, 2e-107;
 Matches 233; Conservative 89; Mismatches 115; Indels 16; Gaps 5;

131 VLDLYSGRVGDLPRKACICVDEDCAHVGCCHPAVAFMAQVLEFASPTFOVAELTNLFQRL 190
 7 VLAVYSSRYRPPKGVSECDENCCVACRPVADMELVLAIFKIPELITLYQRHL 66
 191 LDVLDKVEVDNLLILSVANLCKSCMKLLERCLDMVNSNDMTLEKSLPPDVTKQII 250
 67 LDVVDKVIEDTLVILKLANICGKACMKLLDRCKEIIIVKSNVDMVSLKSLPELVEKEII 126
 251 DARLSGLISPEKGFPPNKHVRIRHRLSDSDVELYRMLLTGQTNLDDAFALHVAVEHC 310
 127 DRKRELGLEVPKVK---KHVSNVHKAALSDSDIELVKLLKEDHTNLDACALHFAVAYC 182
 311 DSKITTELDLADLVNHRNPRGYTLVHIAARRREKTIIVSLTIGKARPADVTFDGRKAV 370
 183 NVKATADLKLADLVNHRNPRGYTLVHVAAMRKEPQLILSLLEKASASEATLEGRAL 242
 371 QISKRLTKGQDYGVTVEEGKPSKDRCLTEILLEQARRDPOLGEASVSLAMAGESLGRGL 430
 243 MIKQATMAVACNNIPBQCHSLKGRCLVEILLEQEDKREQIPRDVPSFVADELKMTL 302
 431 LVLENRVALARIMPEARVAMDIAVDGTLFENLGSANPPPER---ORTVVDLINESP 486
 303 LDLENRVALARIFPEARQAAMEIAEKGCETIVTS---LEPDRILGTKRISPGVKIAP 359
 487 FIMKEEHLARMTALSKTVELGKRRFPFPCSNVLKIND-DETDVPSLGRTSAKR---K 541
 360 FRILEEHOSRLKALSKTVELGKRRFPFPCSAVLDQIMNCEDTLQAGEDDTAERKLRQKKQ 419
 542 RFHLDQVLOKAFHEKDEKENDRSGLSSSSSSTS 574
 420 RYMEIDETLKAFSEDMLELGNLSLTDSTSTS 452

RESULT 10

US-08-989-478-14
 Sequence 14, Application US/08989478
 Patent No. 5986082

GENERAL INFORMATION:

APPLICANT: Utnes, Scott
 APPLICANT: Hunt, Michelle
 APPLICANT: Steiner, Henry-John
 APPLICANT: Ryals, John
 TITLE OF INVENTION: ALTERED FORMS OF THE NIMI GENE CONFERRING
 TITLE OF INVENTION: DISEASE RESISTANCE IN PLANTS
 NUMBER OF SEQUENCES: 32
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: No. 5986082artis Corporation
 STREET: 3054 Cornwallis Road
 CITY: Research Triangle Park
 STATE: No. 5986082th Carolina
 COUNTRY: USA
 ZIP: 27709

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/989,478
 FILING DATE:
 CLASSIFICATION:
 PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/033,177
 FILING DATE: 13-DEC-1996
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 60/034,379
 FILING DATE: 27-DEC-1996
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 60/034,382
 FILING DATE: 27-DEC-1996
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 60/034,730
 FILING DATE: 10-JAN-1997
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 60/035,021
 FILING DATE: 10-JAN-1997
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 60/035,022
 FILING DATE: 10-JAN-1997
 ATTORNEY/AGENT INFORMATION:
 NAME: Meigs, J. Timothy
 REGISTRATION NUMBER: 38,241
 REFERENCE/DOCKET NUMBER: PF/5-21214/P1/CGC1911
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (919) 541-8587
 TELEFAX: (919) 541-8689
 INFORMATION FOR SEQ ID NO: 14:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 397 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-989-478-14

Query Match 35.7%; Score 1052.5; DB 2; Length 397;
 Best Local Similarity 53.4%; Pred. No. 5, 3e-99;
 Matches 212; Conservative 76; Mismatches 98; Indels 11; Gaps 3;

131 VLDLYSGRVGDLPRKACICVDEDCAHVGCCHPAVAFMAQVLEFASPTFOVAELTNLFQRL 190
 7 VLAVYSSRYRPPKGVSECDENCCVACRPVADMELVLAIFKIPELITLYQRHL 66
 191 LDVLDKVEVDNLLILSVANLCKSCMKLLERCLDMVNSNDMTLEKSLPPDVTKQII 250
 67 LDVVDKVIEDTLVILKLANICGKACMKLLDRCKEIIIVKSNVDMVSLKSLPELVEKEII 126
 251 DARLSGLISPEKGFPPNKHVRIRHRLSDSDVELYRMLLTGQTNLDDAFALHVAVEHC 310
 127 DRKRELGLEVPKVK---KHVSNVHKAALSDSDIELVKLLKEDHTNLDACALHFAVAYC 182
 311 DSKITTELDLADLVNHRNPRGYTLVHIAARRREKTIIVSLTIGKARPADVTFDGRKAV 370
 183 NVKATADLKLADLVNHRNPRGYTLVHVAAMRKEPQLILSLLEKASASEATLEGRAL 242
 371 QISKRLTKGQDYGVTVEEGKPSKDRCLTEILLEQARRDPOLGEASVSLAMAGESLGRGL 430
 243 MIKQATMAVACNNIPBQCHSLKGRCLVEILLEQEDKREQIPRDVPSFVADELKMTL 302
 431 LVLENRVALARIMPEARVAMDIAVDGTLFENLGSANPPPER---ORTVVDLINESP 486
 303 LDLENRVALARIFPEARQAAMEIAEKGCETIVTS---LEPDRILGTKRISPGVKIAP 359
 487 FIMKEEHLARMTALSKTVELGKRRFPFPCSNVLKIND 523
 360 FRILEEHOSRLKALSKTVELGKRRFPFPCSAVLDQIMN 396

RESULT 11

US-08-996-685-14
 Sequence 14, Application US/08996685
 Patent No. 6031153
 GENERAL INFORMATION:
 APPLICANT: Ryals, John
 APPLICANT: Friedrich, Leslie
 APPLICANT: Utnes, Scott

APPLICANT: Molina, Antonio
APPLICANT: Ruess, Wilhelm
APPLICANT: Knauf-Belter, Gertrude
APPLICANT: Kung, Ruth
APPLICANT: Kessmann, Helmut
APPLICANT: Oostendorp, Michael
TITLE OF INVENTION: METHOD FOR PROTECTING PLANTS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 6031153artis Corporation
STREET: 3054 Cornwallis Road
CITY: Research Triangle Park
STATE: No. 6031153th Carolina
COUNTRY: USA
ZIP: 27709
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/996,685
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/761,543
FILING DATE: 6-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,378
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,379
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,382
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,730
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035,021
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035,022
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035,024
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/875,015
FILING DATE: 16-JUL-1997
ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38, 241
REFERENCE/DOCKET NUMBER: PF/5-21215/P1/CGC1912
TELEPHONE: (919) 541-8587
TELEFAX: (919) 541-8589
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 397 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-996-685-14

Query Match 35.7%: Score 1052.5; DB 3; Length 397;
Best Local Similarity 53.4%: Pred. No. 5.3e-99;
Matches 212: Conservative 76; Mismatches 98; Indels 11; Gaps 3;

QY 131 VLDYLSGVRGDLPKAACCTVDEDCAHVCGHPAVAFMAQVLFFASTFOVAELTNLFQRRL 190
DB 7 VLAVYSSNRPRPKGVSCADENCGHVACRAVDMLLEVLIATFKIPELITLQRHL 66

QY 191 LDVIDKEVDNLLILTSVANLCKNSCKMLLERCLDWMVRSNLDMTLEKSLPPDVIKOII 250
DB 67 LDVYDKVVEDTLVILKLANICGKACMKLLDRCKELTVSNNDMSLESLPELVKEII 126
QY 251 DARLSGLISPENKGFPNKHVRIRHRLDSDVVELVRLMLETGOTNLDDAFALHVAVEHC 310
DB 127 DRKKEGLLEVPKVK---KHVSVMKALSDSDIELVKLLKEDHTNLDQACALHFPAVAVC 182
QY 311 DSKITTELDLADVYNNHNPRTYVLIHIAARRREKTIIVSLTKCARADVTEDGRKAV 370
DB 183 NKTATDLDKLDLADVNNHNPRTYVLIHIAARRREKTIIVSLTKCARADVTEDGRKAV 242
QY 371 QISKRLTKGDFGVTEEGKPSPKRCLTEIIEQARRPQJGEASVSLAMAGESLGRRL 430
DB 243 MIAKQNTMAVECCNNIPEQCKHSLKGRCLVEILQEDKREQIPRDVPSFAVADLKMPL 302
QY 431 LYLENVALARIMEPEAVAMDIAQVDTLEFNLSGANPPER---QRTTVDLNESP 486
DB 303 LDLENVALAQRFPPEQAAMEIAEMKGTCEFIYS---LEPDRLTGTRKISPGVKIAP 359
QY 487 FIMKEEHLARMTALSKTVELGKRFPPRCNSVLDKIMD 523
DB 360 FRIEEOHSLKALSKTVELGKRFPPRCNSVLDKIMD 396

RESULT 12
US-08-989-478-16
Sequence 16, Application US/08989478
Patent No. 5986082
GENERAL INFORMATION:
APPLICANT: uknes, Scott
APPLICANT: Hunt, Michelle
APPLICANT: Steiner, Henry-York
APPLICANT: Ryals, John
TITLE OF INVENTION: ALTERED FORMS OF THE NIM1 GENE CONFERRING
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 5986082artis Corporation
STREET: 3054 Cornwallis Road
CITY: Research Triangle Park
STATE: No. 5986082th Carolina
COUNTRY: USA
ZIP: 27709
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/989,478
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/033,177
FILING DATE: 13-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,379
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,382
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,730
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035,021
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035,022
FILING DATE: 10-JAN-1997
ATTORNEY/AGENT INFORMATION:


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: TITLE OF INVENTION: death and their use in the modification of forestry plant develo
: FILE REFERENCE: 1022
: CURRENT APPLICATION NUMBER: US/09/325,932A
: CURRENT FILING DATE: 1999-06-04
: NUMBER OF SEQ ID NOS: 206
: SOFTWARE: FastSeq for Windows Version 3.0
: SEQ ID NO 197
: LENGTH: 143
: TYPE: prt
: ORGANISM: Eucalyptus grandis
US-09-325-932A-197

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Query Match          14.2% Score 420; DB 4; Length 143;
Best Local Similarity 58.8% Pred. No. 4,6e-35;
Matches 80; Conservative 27; Mismatches 29; Indels 0; Gaps 0;

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QY 269 KHVRIHRLSDSDVELVRLNLTGQTNLDDAFALHYAVEHCDSKITTELLDLALADVNH 328
      1 :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 6 KRIKRIHKALSDSDIELVTLTLLSESNINLDEAYGLHYAAYCDPKVYSELGLGLANVNL 65
      1 :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 329 RNRGTYVLIHARRREPKIYVSLTKGAPADYTFDGKRAVOISKRTKGDFCYTEE 388
      1 :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 66 RNRGTYVLIHARRREPKIYVSLTKGACASELTPDGNAAVSIKRLYRPKDYNAKTEQ 125
      1 :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 389 GKSPKDRLCIEITEQ 404
      1 :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 126 CCEANKDRCLIDYLER 141
      1 :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

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RESULT 15
US-09-325-932A-199
: Sequence 199, Application US/09325932A
: Patent No. 6451604
: GENERAL INFORMATION:
: APPLICANT: Flinn, Barry
: APPLICANT: Lasham, Annette
: TITLE OF INVENTION: Compositions affecting programmed cell
: TITLE OF INVENTION: death and their use in the modification of forestry plant develo
: FILE REFERENCE: 1022
: CURRENT APPLICATION NUMBER: US/09/325,932A
: CURRENT FILING DATE: 1999-06-04
: NUMBER OF SEQ ID NOS: 206
: SOFTWARE: FastSeq for Windows Version 3.0
: SEQ ID NO 199
: LENGTH: 102
: TYPE: prt
: ORGANISM: Eucalyptus grandis
US-09-325-932A-199

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Query Match          6.8% Score 201; DB 4; Length 102;
Best Local Similarity 37.5% Pred. No. 6,5e-13;
Matches 42; Conservative 23; Mismatches 33; Indels 14; Gaps 3;
QY 74 HRCVLARSFPLRGVAFARRAAAGGGE--DGSRLRLRELLGGGEEVEYGEALRL 130
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Db 1 HRCVLARSFPLRGVAFARRAAAGGGE--DGSRLRLRELLGGGEEVEYGEALRL 130
      1 :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 131 VLDYLYSGRYGDI:PKAACLCYDEDCAHVGCCHPAVAFMAQVLFPAASTFQVAEL 182
      1 :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 50 VLRMYMTGKLKLPAAVSTCVDSACAHVGCCHPAVAFMAQVLFPAASTFQVAEL 101
      1 :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

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Search completed: January 3, 2003, 22:53:13
Job time : 23 secs

GenCore version 5.1.3
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: January 3, 2003, 22:51:17 : Search time 16 seconds
(without alignments)
689.362 Million cell updates/sec

Title: US-09-294-539-4

Perfect score: 2952

Sequence: 1 MEPTSHVTNFAFSDSDASV.....RSLGSSSSSTSGAIRPR 582

Scoring table:

BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 117078 seqs, 18951520 residues

Total number of hits satisfying chosen parameters: 117078

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published_Applications_AA:*

- 1: /cgn2_6/ptodata/1/pubpaa/US08_NEM_PUB.pep:*
- 2: /cgn2_6/ptodata/1/pubpaa/PCRT_NEM_PUB.pep:*
- 3: /cgn2_6/ptodata/1/pubpaa/US06_NEM_PUB.pep:*
- 4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
- 5: /cgn2_6/ptodata/1/pubpaa/US07_NEM_PUB.pep:*
- 6: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
- 7: /cgn2_6/ptodata/1/pubpaa/PCRTUS_PUBCOMB.pep:*
- 8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
- 9: /cgn2_6/ptodata/1/pubpaa/US08_NEM_PUB.pep:*
- 10: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*
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- 12: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep:*
- 13: /cgn2_6/ptodata/1/pubpaa/US60_NEM_PUB.pep:*
- 14: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|--------|-------------|--------|---------------------|-------------------|
| 1 | 1672.5 | 56.7 | 588 | 8 US-08-908-884-14 | Sequence 14, Appl |
| 2 | 1672.5 | 56.7 | 588 | 10 US-09-908-323-14 | Sequence 12, Appl |
| 3 | 1276 | 43.2 | 593 | 8 US-08-908-884-3 | Sequence 3, Appl |
| 4 | 1276 | 43.2 | 593 | 10 US-09-908-323-3 | Sequence 3, Appl |
| 5 | 1276 | 43.2 | 593 | 12 US-10-079-035-3 | Sequence 3, Appl |
| 6 | 1045.5 | 35.4 | 592 | 9 US-10-047-593-2 | Sequence 2, Appl |
| 7 | 1045.5 | 35.4 | 592 | 9 US-10-047-593-4 | Sequence 4, Appl |
| 8 | 168 | 5.7 | 49 | 8 US-08-908-884-4 | Sequence 4, Appl |
| 9 | 168 | 5.7 | 49 | 10 US-09-908-323-4 | Sequence 4, Appl |
| 10 | 122 | 4.1 | 41 | 12 US-10-079-035-4 | Sequence 4, Appl |
| 11 | 122 | 4.1 | 41 | 12 US-10-079-035-6 | Sequence 6, Appl |
| 12 | 122 | 4.1 | 41 | 12 US-10-079-035-8 | Sequence 8, Appl |
| 13 | 122 | 4.1 | 41 | 12 US-10-079-035-10 | Sequence 10, Appl |
| 14 | 121 | 4.1 | 33 | 8 US-08-908-884-8 | Sequence 8, Appl |
| 15 | 121 | 4.1 | 33 | 10 US-09-908-323-8 | Sequence 8, Appl |
| 16 | 119.5 | 4.0 | 359 | 9 US-09-844-988-2 | Sequence 2, Appl |
| 17 | 119.5 | 4.0 | 359 | 10 US-09-844-988-2 | Sequence 2, Appl |
| 18 | 114.5 | 3.9 | 1074 | 10 US-09-509-196A-2 | Sequence 2, Appl |
| 19 | 114 | 3.9 | 210 | 9 US-09-924-400-331 | Sequence 331, App |

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|----|-------|-----|------|----------------------|-------------------|
| 20 | 114 | 3.9 | 210 | 10 US-09-810-936-331 | Sequence 331, App |
| 21 | 113 | 3.8 | 33 | 8 US-08-908-884-9 | Sequence 9, Appl |
| 22 | 113 | 3.8 | 33 | 10 US-09-908-323-9 | Sequence 9, Appl |
| 23 | 113 | 3.8 | 384 | 9 US-09-924-400-340 | Sequence 340, App |
| 24 | 112.5 | 3.8 | 329 | 10 US-09-880-192-62 | Sequence 62, Appl |
| 25 | 112.5 | 3.8 | 329 | 10 US-09-758-593A-1 | Sequence 1, Appl |
| 26 | 110.5 | 3.7 | 673 | 10 US-09-841-835-8 | Sequence 8, Appl |
| 27 | 110.5 | 3.7 | 1724 | 9 US-09-964-889-43 | Sequence 43, Appl |
| 28 | 110 | 3.7 | 292 | 9 US-09-924-400-315 | Sequence 315, App |
| 29 | 110 | 3.7 | 292 | 9 US-10-012-896-532 | Sequence 532, App |
| 30 | 110 | 3.7 | 292 | 9 US-09-895-793-532 | Sequence 532, App |
| 31 | 110 | 3.7 | 292 | 9 US-09-895-814-532 | Sequence 532, App |
| 32 | 110 | 3.7 | 292 | 10 US-09-825-301-4 | Sequence 4, Appl |
| 33 | 110 | 3.7 | 292 | 10 US-09-759-143-532 | Sequence 532, App |
| 34 | 110 | 3.7 | 292 | 10 US-08-760-669-532 | Sequence 532, App |
| 35 | 110 | 3.7 | 292 | 10 US-09-810-936-315 | Sequence 315, App |
| 36 | 110 | 3.7 | 292 | 10 US-09-822-827-532 | Sequence 532, App |
| 37 | 110 | 3.7 | 292 | 10 US-09-429-755-315 | Sequence 315, App |
| 38 | 110 | 3.7 | 329 | 9 US-09-924-400-299 | Sequence 299, App |
| 39 | 110 | 3.7 | 329 | 9 US-10-012-896-376 | Sequence 376, App |
| 40 | 110 | 3.7 | 329 | 9 US-09-895-793-376 | Sequence 376, App |
| 41 | 110 | 3.7 | 329 | 9 US-09-895-814-376 | Sequence 376, App |
| 42 | 110 | 3.7 | 329 | 10 US-09-825-301-2 | Sequence 2, Appl |
| 43 | 110 | 3.7 | 329 | 10 US-09-759-143-376 | Sequence 376, App |
| 44 | 110 | 3.7 | 329 | 10 US-09-780-669-376 | Sequence 376, App |
| 45 | 110 | 3.7 | 329 | 10 US-09-810-936-299 | Sequence 299, App |

ALIGNMENTS

RESULT 1
US-08-908-884-14
; Sequence 14, Application US/08908884
; Patent No. US2002013872A1
; GENERAL INFORMATION:
; APPLICANT: Dong et al.
; TITLE OF INVENTION: ACQUIRED RESISTANCE GENES AND USNS THEREOF
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FASTSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/908, 884
; FILING DATE:
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/023,851
; FILING DATE: August 9, 1996
; APPLICATION NUMBER: 60/035,166
; FILING DATE: January 10, 1997
; APPLICATION NUMBER: 60/046,769
; FILING DATE: May 16, 1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Elbing, Karen L
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/339004
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; INFORMATION FOR SEQ ID NO: 14:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 588 amino acids
; TYPE: amino acid

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; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-908-884-14

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| Query Match | 56.7% | Score 1672.5 | DB 8 | Length 588 |
| Best Local Similarity | 56.8% | Pred. No. 4.2e-131 | | |
| Matches 336 | Conservative 102 | Mismatches 119 | Indels 35 | Gaps 8 |

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QY 57 ARIAVPGGGGGGDLRHHRCVLSARSPELRGVFAHRAAAAAGGGGEGDESRLERELGG 111
| : | : | : | : | | | | | | | : | : | : | : | : | : | : | : | :
Db 67 AKLVV--SSPCKEIPVHHCLLSARSPFFKNLFC-----GKERKSSKVELKEVM-- 111
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QY 117 GGEFEVEGYEALRLVDLYTSGRVGDLPRKAACLYCDEDCAHVGHCPVAVMAOYLEPAST 173
| : | : | : | : | | | | | : | : | | | | | | | | | | | | | : | :
Db 114 --KEHEYSYDAVAVSLAYLYTSGRVSPSPEDYCVCDNDNCSHVACRPVAVLELYTSTFT 173
| | | | | : | | | | | : | | | | | : | | | | | : | | | | | :
QY 177 FOVAELTNLFORELLDLDKVEVDNLLITLSTANLCKNSCKMLRECLDMDVAVSNDLMT 223
| | | | | : | | | | | : | | | | | : | | | | | : | | | | | :
Db 172 FOISELVDKROHLLDLIKTADADVMWLVSAVTCGACRRLSSCETITVANSNDIT 230
| | | | | : | | | | | : | | | | | : | | | | | : | | | | | :

```

RESULT 2
US-09-908-323-14
; Sequence 14, Application US/09908323
; * Patent No. US20020073447A1

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEO for Windows Version 2.0.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/9008,323
FILING DATE: 17-Jul-2001

```

1 CLASSIFICATION: <Unknown>
2 PRIOR APPLICATION DATA:
3 APPLICATION NUMBER: 08/908,884
4 FILING DATE: <Unknown>
5 APPLICATION NUMBER: 60/035,166
6 FILING DATE: January 10, 1997
7 APPLICATION NUMBER: 60/046,769
8 FILING DATE: May 16, 1997
9 ATTORNEY/AGENT INFORMATION:
10 NAME: Elbing, Karen L.
11 REGISTRATION NUMBER: 35,238
12 REFERENCE/DOCKET NUMBER: 00786/339004
13 TELECOMMUNICATION INFORMATION:
14 TELEPHONE: 617-428-0200
15 TELEFAX: 617-428-7045
16 INFORMATION FOR SEQ ID NO: 14:
17 SEQUENCE CHARACTERISTICS:
18 LENGTH: 588 amino acids
19 TYPE: amino acid
20 STRANDEDNESS: single
21 TOPOLOGY: linear
22 MOLECULE TYPE: protein
23 SEQUENCE DESCRIPTION: SEQ ID NO: 14:
24 GS-09-908-323-14

```

| | | | | |
|-----------------------|-------------------|---------------------|------------|-------------|
| Query Match | 56.7%; | Score 1672.5; | DB 10; | Length 588; |
| Best Local Similarity | 56.8%; | Pred. No. 4.2e-131; | | |
| Matches 336; | Conservative 102; | Mismatches 119; | Indels 35; | Gaps 8; |

| | | | | |
|----|-----|--|--------------------------------------|-----|
| QY | 11 | AFSODSAKSYVE----- | IGDADADADVEALRLSDNLNAAAF--KSPDEFAFAD | 56 |
| Db | 7 | AFSODNDISGSSSTICCIAGGTEFFESPEETSAELTISLKRLESTLESI.FFDASLPEFDYFAD | | 66 |
| QY | 57 | ARIAVPGGGGGGDLRVHRCVLSARSPEFLRGVFARRAAAAAGGGEDGSERLBRELJGG | | 116 |
| Db | 67 | AKLVV---SGCKEIPVHRCILISARSPFFKMLFC-----GKKEKNSKVELKEVY-- | | 113 |
| QY | 117 | GGEVEVEVGYEALRLVLDYLSGRGVDLPKAACLCYDDDCAHVGHCHPVAAMQVLFMAST | | 176 |
| Db | 114 | --KEHEVSYDAMSVLALYSKGKVPSPKDCVCVDNDCSHVACRPVAFVLEVLATYSET | | 171 |
| QY | 177 | FOVAELTLFORLLDLYDVKVEYNLLTISVANICNKSCKHLEROLDIMVVRNSLMT | | 236 |
| Db | 172 | FOISLVLKFORHLLDILDKRADAQVMVLSVANICGACGRLLLSOCIETIVKSNVDIT | | 231 |
| QY | 237 | LEKSLPPVDYKOIIDARLSLGLISPEKNGFPNNKHVRIRHRLSDDYELVYRMLLTBECOTN | | 296 |
| Db | 232 | LDKALPHIVKQITDSRAELTSGPESNGFPDKHYKRIHRALDSDVDYELLMLREGHIT | | 291 |
| QY | 297 | LDDAFALHYAHEHCDSKITTELDDLADAVHNRPRGTYVTHIARREPKIIVSLLTGK | | 356 |
| Db | 292 | LDDAVALHYAAYACCAKTAJELLDLADINHONSRGTYVTHVAMKREPIVIVSLLTGK | | 351 |
| QY | 357 | ARPAVYVTEGDKRAVOISKRLTKOGYFEGVTEEGKPSPPDRICIEILBQAEKRDQULCEAS | | 416 |
| Db | 352 | ARPSULTIDGKRAIDIAKRLTRLVDFSSPBEKGSANSNDRLCIELBQAEKRDQLBGEAS | | 411 |
| QY | 417 | VSIAWAGESLGRGLYLENRYALAKIMFPMEARVAMDAIQAQVGTLEFNLSGANPPEBQ | | 476 |
| Db | 412 | VSIAWAGADLRKLLYLENRYGLAKLEPPMEAKVAMDAIQAQVGTSEPLASIGKMMANQ | | 471 |
| QY | 477 | RTVYDLNESPTLMKEEHLARMTALSKYVELCKRPPRCNSVNLKIM--DDETDPVSLGRD | | 533 |
| Db | 472 | RTVYDLNAPFAPEKIEEHLNRRALSRTVELCKRPPRCSEVYLNKIMADDLSELAHYMGND | | 531 |
| QY | 535 | TSAE--KRRRHLDQVYLQAFHEHDKENDR--SGLSSSSSTSGIARPRR | | 582 |
| Db | 532 | TAEEQOLKQRMELQELITLTAFTEDKKEKYTKNNISSCSTSGKVDKPK | | 583 |

RESULT 3
US-08-908-884-3
; Sequence 3, Application US/08908884

Patent No. US20020138872A1
 : PATENT INFORMATION:
 : APPLICANT: Dong et al.
 : TITLE OF INVENTION: ACQUIRED RESISTANCE GENES AND USES THEREOF
 : NUMBER OF SEQUENCES: 28
 : CORRESPONDENCE ADDRESS:
 : ADDRESSEE: Clark & Elbing LLP
 : STREET: 176 Federal Street
 : CITY: Boston
 : STATE: MA
 : COUNTRY: USA
 : ZIP: 02110
 : COMPUTER READABLE FORM:
 : MEDIUM TYPE: Diskette
 : COMPUTER: IBM Compatible
 : OPERATING SYSTEM: DOS
 : SOFTWARE: FASTSEQ for Windows Version 2.0
 : CURRENT APPLICATION DATA:
 : APPLICATION NUMBER: US/08/908,884
 : FILING DATE:
 : CLASSIFICATION: 800
 : PRIOR APPLICATION DATA:
 : APPLICATION NUMBER: 60/023,851
 : FILING DATE: August 9, 1996
 : APPLICATION NUMBER: 60/035,166
 : FILING DATE: January 10, 1997
 : APPLICATION NUMBER: 60/046,769
 : FILING DATE: May 16, 1997
 : ATTORNEY/AGENT INFORMATION:
 : NAME: Elbing, Karen L.
 : REGISTRATION NUMBER: 35,238
 : REFERENCE/DOCKET NUMBER: 00786/339004
 : TELECOMMUNICATION INFORMATION:
 : TELEPHONE: 617-428-0200
 : TELEFAX: 617-428-7045
 : INFORMATION FOR SEQ ID NO: 3:
 : SEQUENCE CHARACTERISTICS:
 : LENGTH: 593 amino acids
 : TYPE: amino acid
 : STRANDEDNESS: single
 : TOPOLOGY: linear
 : MOLECULE TYPE: protein
 : US-08-908-884-3

Query Match 43.2%; Score 1276; DB 8; Length 593;
 Best Local Similarity 47.2%; Pred. No. 3,7e-98;
 Matches 273; Conservative 113; Mismatches 165; Indels 28; Gaps

9

[illegible]

```

1      APPLICATION NUMBER: 08/880,179
2      FILING DATE:
3      ATTORNEY/AGENT INFORMATION:
4      NAME: Weigs, J. Timothy
5      REGISTRATION NUMBER: 38,241
6      REFERENCE/DOCKET NUMBER: CGC 1909
7      TELECOMMUNICATION INFORMATION:
8      TELEPHONE: (919) 541-8587
9      TELEFAX: (919) 541-8689
10     INFORMATION FOR SEQ ID NO. 3:
11     SEQUENCE CHARACTERISTICS:
12     LENGTH: 593 amino acids
13     TYPE: amino acid
14     TOPOLOGY: linear
15     MOLECULE TYPE: protein
16     US-10-079-035-3
17
18     Query Match 43.2%; Score 1276; DB 12; Length 593;
19     Best Local Similarity 47.2%; Pred. No. 3,76-98;
20     Matches 273; Conservative 113; Mismatches 165; Indels 28; Gaps
21
22 QY 5 TSHYTNAFSSDSASVEEGDADADADAVELRLNLNLAAARSPEDPAFLADARIAPGC 64
23      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
24 Db 17 TSEFATDNTDSTSYVYLAAEQVLTGPVSALQTLSSFSFSDSPD - FTSDAKLVL--- 71
25
26 QY 65 GGGGCGDVRRCVCLASRSPFLRGVFARAAAGGSGEDGSERLRLRLLGGGEVEYG 124
27      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
28 Db 72 -SDGREVSPFRCLVLSRRSSPEKSAAL -AAKKEDSNMTAAVKLELKEI---AKDYEVG 124
29
30 QY 125 YEALRLVLDVLYSGRGVGLDPLKAACLCVDEDDCAHVGCCHRAVAFMAQVLFAASTPQVALTLN 164
31      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
32 Db 125 FDSVVFVLAIVVYSRRPPEKGVSECDADENCCCHVACRPADVFMLEVLVLAIFKIPELIT 164
33
34 QY 185 LFORRLIDVLDKYEVENLLILITSVALLCKRSCMKLIERCLDMVVRNSIDMTLTKSLPPD 244
35      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

```

```

DQ      245  VIKQIDARLSLGISBENKGPNNKIVRIIHRALDSODELYKMLLTGCGQNNDDAALH 304
        : : : : : | | | | | : | | | | | : | | | | | : | | | | | : | | | | |
DQ      245  LKVELIDRRRELGLEVPKVK---KIVSVHKALDSDDEILKLLKLDHNNLDDACALH 300
        : : : : : | | | | | : | | | | | : | | | | | : | | | | | : | | | | |
QY      305  YAVBHCDSKTTTELDELADLVNHRNDRPGYVLIHIAARRREKIIIVSLTKGAPADVTE 364
        : | | : | | : | | | | | : | | | | | : | | | | | : | | | | | : | | | | |
DQ      301  FAVAYCNKATATDLKILKLADLVNHRNDRPGYVLIHVAAMKKEPQLLISLLEKGAASEATL 360
        : | | : | | : | | | | | : | | | | | : | | | | | : | | | | | : | | | | |
QY      365  DGRRAVDLSKRLKQGDYFGVTEEEKPSPKDLCLTILEQARERDPPOLGEASVSLAAGE 424
        : : : : : | | | | | : | | | | | : | | | | | : | | | | | : | | | | |
DQ      361  EGRALIMAKCATAAVECCNNIPQOCHSHSLKGRCLVLEIQEOKERQOIPRDVPPSPVAAD 420
        : : : : : | | | | | : | | | | | : | | | | | : | | | | | : | | | | |
QY      425  SLRGRLTYLLENRVALARIMPFARVAPVADYDGLTFENLCSGANPPER---QRTTV 480
        : | | | | | | | | | | | : | | | | | : | | | | | : | | | | | : | | | | |
DQ      421  ELKMTLLDENRVALARLPTTBAQAAELAEKKGCEIYIVS---LEPRDLTGKRTSP 477
        : | | | | | | | | | | | : | | | | | : | | | | | : | | | | | : | | | | |
QY      481  DLNESPFIMKEEHLARMTALSKTVLELGRFPFCSAVLKDIMD-DETPBVSIGRDTSAEK 539
        : : | | : | | : | | | | | : | | | | | : | | | | | : | | | | | : | | | | |
DQ      478  GVKYIAFPLELIEHOSRKLASKTVLELGRFPFCSAVLQIINCCEDTLQALACGEDDTAEK 537
        : : | | : | | : | | | | | : | | | | | : | | | | | : | | | | | : | | | | |
QY      540  R---KRFHDLQVLOKAFHDEKKEENDRSGLSSSSSTS 574
        : : | | : | | : | | | | | : | | | | | : | | | | | : | | | | | : | | | | |
DQ      538  RLQKKQRMETQETLKKAFSEDNLELGNSSLDTJSTSTS 576
        : : | | : | | : | | | | | : | | | | | : | | | | | : | | | | | : | | | | |

RESULT 6
US-10-047-593-2
; Sequence 2, Application US/10047593
; Patent No. US20020170094A1
; GENERAL INFORMATION:
; APPLICANT: Crane, Edmund H. III
; APPLICANT: Rice, Douglas A.
; TITLE OF INVENTION: Maize NPTI Polynucleotides and Methods
; TITLE OF INVENTION: of use
; FILE REFERENCE: 1090UD
; CURRENT APPLICATION NUMBER: US/10/047,593

```



```

; CURRENT FILING DATE: 2002-01-15
; PRIOR APPLICATION NUMBER: 60/130,692
; PRIOR FILING DATE: 1999-04-23
; PRIOR APPLICATION NUMBER: 09/551,778
; PRIOR FILING DATE: 2000-04-18

```

```

; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FASTSEQ for Windows version 4.0

```

```

; SEQ ID NO 2
; TYPE: PRF
; ORGANISM: Zea mays
; US-10-047-593-2

```

```

Query Match          35.4%; Score 1045.5; DB 9; Length 592;
Best Local Similarity 43.2%; Pred. No. 5.2e-79;
Matches 239; Conservative 92; Mismatches 187; Indels 35; Gaps 10;

```

```

OY 25 ADADADVEA--LRRUSDNLAAAFRSPEDFAFLADARIAVPGGGGGGDLRVHRCVLSARS 82
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 51 ASGGSGVEAVSLNRLSKNLERLLDPD--LDCSDADVDP---DGGPPVPIHRCILAAAS 105
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 83 PLRGVFARR-----AAAAAG---GGGEDSERLELRELLGGGEEVEGYEALRL 130
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 106 DFEYDLFAARGRAGAARGDAAGAGVAAGAAAGSRRPRYKMEDLVAPG---RVGREAFQA 161
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 131 VLDYLYSGAVGDLPKAACLCVDEDCAHVGCHPAVAFMAOVLFAASTFOYAEITNLFQRRL 190
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 162 FLGYLYTGKLRAPVDVVSACADPVCHHDSCPAIRSAVELMAACTFKIPELTSIFQRRL 221
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 191 LDVLDKVEVDNLLLSVANLCKSKMLERCLDMVVRNSLDMITLREKSLRPDVYKQII 250
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 222 LNFVDKTLVEDVPILEVAS--HSGLTQVYDKTORIARSDLDLSDLELPEAVDEIK 279
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 251 DARLSGLISPE---NKGEPNKHVRRIHRLALSDSDVELVRLTEGQTNLDAFALHYAV 307
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 280 NLRKKSQTADGOTFTISDPVHEKRVRIHRLALSDSDVELVRLTESDITLDDANALHYAA 339
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 308 EHCDKITTLELDLADVNHNRPRGYTLVHTAARREPKIIVSLTCKARPAVDTFDGR 367
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 340 SYCDPRVVELLDLAMANLNKNSRGYTLHLAAMRREPAITIMCLNKGANVSQLTADGR 399
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 368 KAVOISKRLTKGQDYFGVTEEGKPSPKDRICIEILQEARRPQGLGEASVSLAMGESLR 427
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 400 SAIGICRRLTRAKDYVTMKKEGQESNKORCIDILEREKMRNMAVEDAVTSPLLADDH 459
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 428 GRLLYLENNVALARIMFPEARVAMDIAOVDTGLEFNLSGANPPPERORTTYDLNESPF 487
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 460 MKLLYLENNVAFARLFFPAEAKVAMQIAQADTTEFGGIIVAAVASTSGKLREVDLNETYV 519
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 488 IMKEHLAMTALSKTVELGKRFPPRCNVLDKIMDE---TDPVSLGRDTSAE---KR 540
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 520 TONKRLRSVVDALMKTVELGRYFPNCSQVLDKFLLEDLPREGIDQFYLRGTADGQVKR 579
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 541 KRPHDQDVLQKA 553
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 580 MRCELKEDVLKA 592

```

```

RESULT 7
US-10-047-593-4
; Sequence 4, Application US/10047593
; Patent No. US20020170094A1
; GENERAL INFORMATION:
; APPLICANT: Crane, Edmund H. III
; APPLICANT: Rice, Douglas A.
; TITLE OF INVENTION: Maize Npr1 Polynucleotides and Methods
; FILE REFERENCE: 1090D2
; CURRENT APPLICATION NUMBER: US/10/047,593
; PRIOR APPLICATION NUMBER: 60/130,692
; PRIOR FILING DATE: 1999-04-23
; PRIOR APPLICATION NUMBER: 09/551,778

```

```

; PRIOR FILING DATE: 2000-04-18
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FASTSEQ for Windows version 4.0
; SEQ ID NO 4
; LENGTH: 621
; TYPE: PRF
; ORGANISM: Zea mays
; US-10-047-593-4

```

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Query Match          35.4%; Score 1045.5; DB 9; Length 592;
Best Local Similarity 43.2%; Pred. No. 5.2e-79;
Matches 239; Conservative 92; Mismatches 187; Indels 35; Gaps 10;

```

```

OY 25 ADADADVEA--LRRUSDNLAAAFRSPEDFAFLADARIAVPGGGGGGDLRVHRCVLSARS 82
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 51 ASGGSGVEAVSLNRLSKNLERLLDPD--LDCSDADVDP---DGGPPVPIHRCILAAAS 105
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 83 PLRGVFARR-----AAAAAG---GGGEDSERLELRELLGGGEEVEGYEALRL 130
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 106 DFEYDLFAARGRAGAARGDAAGAGVAAGAAAGSRRPRYKMEDLVAPG---RVGREAFQA 161
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 131 VLDYLYSGAVGDLPKAACLCVDEDCAHVGCHPAVAFMAOVLFAASTFOYAEITNLFQRRL 190
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 162 FLGYLYTGKLRAPVDVVSACADPVCHHDSCPAIRSAVELMAACTFKIPELTSIFQRRL 221
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 191 LDVLDKVEVDNLLLSVANLCKSKMLERCLDMVVRNSLDMITLREKSLRPDVYKQII 250
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 222 LNFVDKTLVEDVPILEVAS--HSGLTQVYDKTORIARSDLDLSDLELPEAVDEIK 279
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 251 DARLSGLISPE---NKGEPNKHVRRIHRLALSDSDVELVRLTEGQTNLDAFALHYAV 307
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 280 NLRKKSQTADGOTFTISDPVHEKRVRIHRLALSDSDVELVRLTESDITLDDANALHYAA 339
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 308 EHCDKITTLELDLADVNHNRPRGYTLVHTAARREPKIIVSLTCKARPAVDTFDGR 367
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 340 SYCDPRVVELLDLAMANLNKNSRGYTLHLAAMRREPAITIMCLNKGANVSQLTADGR 399
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 368 KAVOISKRLTKGQDYFGVTEEGKPSPKDRICIEILQEARRPQGLGEASVSLAMGESLR 427
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 400 SAIGICRRLTRAKDYVTMKKEGQESNKORCIDILEREKMRNMAVEDAVTSPLLADDH 459
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 428 GRLLYLENNVALARIMFPEARVAMDIAOVDTGLEFNLSGANPPPERORTTYDLNESPF 487
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 460 MKLLYLENNVAFARLFFPAEAKVAMQIAQADTTEFGGIIVAAVASTSGKLREVDLNETYV 519
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 488 IMKEHLAMTALSKTVELGKRFPPRCNVLDKIMDE---TDPVSLGRDTSAE---KR 540
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 520 TONKRLRSVVDALMKTVELGRYFPNCSQVLDKFLLEDLPREGIDQFYLRGTADGQVKR 579
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
OY 541 KRPHDQDVLQKA 553
   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db 580 MRCELKEDVLKA 592

```

```

RESULT 8
US-08-908-884-4
; Sequence 4, Application US/0890884
; Patent No. US2002013872A1
; GENERAL INFORMATION:
; APPLICANT: Dong et al.
; TITLE OF INVENTION: ACQUIRED RESISTANCE GENES AND USES THEREOF
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS

```

SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/908,884
FILING DATE:
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/023,851
FILING DATE: August 9, 1996
APPLICATION NUMBER: 60/035,166
FILING DATE: January 10, 1997
APPLICATION NUMBER: 60/046,769
FILING DATE: May 16, 1997
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/339004
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 49 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-908-884-4

Query Match 5.7%; Score 168; DB 8; Length 49;
Best Local Similarity 61.2%; Pred. No. 1.2e-07;
Matches 30; Conservative 11; Mismatches 8; Indels 0; Gaps 0;

OY 327 NHRNPGYTVLHIAARREPKTIYSLTKGAPADVTGGRKAVQISKR 375
DB 1 NHRNPGYTVLHIAARREPKTIYSLTKGAPADVTGGRKAVQISKR 49

RESULT 9
US-09-908-323-4
Sequence 4, Application US/09908323
Patent No. US20020073447A1
GENERAL INFORMATION:
APPLICANT: Dong et al.
TITLE OF INVENTION: ACQUIRED RESISTANCE GENES AND USES THEREOF
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/908,323
FILING DATE: 17-Jul-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/908,884
FILING DATE: <Unknown>
APPLICATION NUMBER: 60/035,166
FILING DATE: January 10, 1997
APPLICATION NUMBER: 60/046,769
FILING DATE: May 16, 1997
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/339004
TELECOMMUNICATION INFORMATION:

TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 49 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-908-323-4

Query Match 5.7%; Score 168; DB 10; Length 49;
Best Local Similarity 61.2%; Pred. No. 1.2e-07;
Matches 30; Conservative 11; Mismatches 8; Indels 0; Gaps 0;

OY 327 NHRNPGYTVLHIAARREPKTIYSLTKGAPADVTGGRKAVQISKR 375
DB 1 NHRNPGYTVLHIAARREPKTIYSLTKGAPADVTGGRKAVQISKR 49

RESULT 10
US-10-079-035-4
Sequence 4, Application US/10079035
Patent No. US20020152499A1
GENERAL INFORMATION:
APPLICANT: Ryals, John
APPLICANT: Delaney, Terry
APPLICANT: Friedrich, Leslie
APPLICANT: Weymann, Kristanna
APPLICANT: Lawton, Kay
APPLICANT: Ellis, Daniel
APPLICANT: Unes, Scott
APPLICANT: Jesse, Taco
APPLICANT: Vos, Pieter
TITLE OF INVENTION: GENE ENCODING A PROTEIN INVOLVED IN THE
TITLE OF INVENTION: SIGNAL TRANSDUCTION CASCADE LEADING TO SYSTEMIC ACQUIRED RE
NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
ADDRESSEE: No. US20020152499A1arlis Corporation
STREET: 520 White Plains Road, P.O. Box 2005
CITY: Tarrytown
STATE: New York
COUNTRY: USA
ZIP: 10591

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/079,035
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/577,799
FILING DATE:
APPLICATION NUMBER: 08/880,179
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: CGC 1909
TELECOMMUNICATION INFORMATION:
TELEPHONE: (919) 541-8689
TELEFAX: (919) 541-8689
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 41 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant

APPLICANT: Delaney, Terry
APPLICANT: Friedrich, Leslie
APPLICANT: Weymann, Kristanna
APPLICANT: Lawton, Kay
APPLICANT: Ellis, Daniel
APPLICANT: Unnes, Scott
APPLICANT: Jesse, Taco
APPLICANT: Vos, Pieter
TITLE OF INVENTION: GENE ENCODING A PROTEIN INVOLVED IN THE
TITLE OF INVENTION: SIGNAL TRANSDUCTION CASCADE LEADING TO SYSTEMIC ACQUIRED RESIS
TITLE OF INVENTION: IN PLANTS
NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESSES:
ADDRESSEE: No. US20020152499A Iarlis Corporation
STREET: 520 White Plains Road, P.O. Box 2005
CITY: Tarrytown
STATE: New York
COUNTRY: USA
ZIP: 10591
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/079,035
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/577,799
FILING DATE:
APPLICATION NUMBER: 08/880,179
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: CGC 1909
TELECOMMUNICATION INFORMATION:
TELEPHONE: (919) 541-8587
TELEFAX: (919) 541-8689
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 41 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
MOLECULE TYPE: peptide
US-10-079-035-10
Query Match 4.1%; Score 122; DB 12; Length 41;
Best Local Similarity 51.2%; Pred. No. 0.0006; 8; Indels 0; Gaps 0;
Matches 21; Conservative 12; Mismatches 8;
QY 271 VRIHRLSDSDVLELVMLTEGQTNIDDAFAHAYVHED 311
DB 1 IRRMRRLDADIELVKLMVGEGLDDLDALVAVYQHCH 41
RESULT 14
US-08-908-884-8
Sequence 8, Application US/08908884
Patent No. US20020138872A1
GENERAL INFORMATION:
APPLICANT: Dong et al.
TITLE OF INVENTION: ACQUIRED RESISTANCE GENES AND USES THEREOF
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/908,884
FILING DATE:
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/023,851
FILING DATE: August 9, 1996
APPLICATION NUMBER: 60/035,166
FILING DATE: January 10, 1997
APPLICATION NUMBER: 60/046,769
FILING DATE: May 16, 1997
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/339004
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 33 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-908-884-8
Query Match 4.1%; Score 121; DB 8; Length 33;
Best Local Similarity 68.8%; Pred. No. 0.00053;
Matches 22; Conservative 5; Mismatches 5; Indels 0; Gaps 0;
QY 269 KHVRIHRLSDSDVLELVMLTEGQTNIDDA 300
DB 1 KHVSNVHRLSDSDIELVKLLKEDEHTNIDDA 32
RESULT 15
US-09-908-323-8
Sequence 8, Application US/09908323
Patent No. US20020073447A1
GENERAL INFORMATION:
APPLICANT: Dong et al.
TITLE OF INVENTION: ACQUIRED RESISTANCE GENES AND USES THEREOF
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/908,323
FILING DATE: 17-Jul-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/908,884
FILING DATE: <Unknown>
APPLICATION NUMBER: 60/035,166
FILING DATE: January 10, 1997
APPLICATION NUMBER: 60/046,769
FILING DATE: May 16, 1997
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.

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: REGISTRATION NUMBER: 35,238
: REFERENCE/DOCKET NUMBER: 00786/339004
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 617-428-0200
: TELEFAX: 617-428-7045
: INFORMATION FOR SEQ ID NO: 8:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 33 amino acids
: TYPE: amino acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: SEQUENCE DESCRIPTION: SEQ ID NO: 8:
US-09-908-323-8

Query Match      4 1% Score 121; DB 10; Length 33;
Best Local Similarity 68.8% Pred. No. 0.00053;
Matches 22; Conservative 5; Mismatches 5; Indels 0; Gaps 0;

Qy 269 KHVRIHRLDSDVDVLRMLLTCGOTNLDDA 300
   ||| :|||:||||:||||| | |||||
Db 1 KHVSNVHKALDSDDELVKLLKEDHTNLDDA 32

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Search completed: January 3, 2003, 22:54:37
Job time : 18 secs

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